March 11, 2003

1420 East 6th Ave.
P.O. Box 200701
Helena, MT 59620-0701

Environmental Quality Council
Montana Department of Environmental Quality
Montana Department of Fish, Wildlife and Parks
    Fisheries Division
    Endangered Species Coordinator
    Native Species Coordinator, Helena
    Missoula Office
Montana State Library, Helena
MT Environmental Information Center
Montana Audubon Council
North Powell Conservation District
U.S. Army Corp of Engineers, Helena
U.S. Fish and Wildlife Service, Helena
State Historic Preservation Office, Helena
Big Blackfoot Chapter Trout Unlimited, P.O. Box 1, Ovando, MT 59854
Mr. Don Peters, 4955 East Carlton Creek Road, Florence, MT 59833
Mr. John Kowalski, 1107 LaGrande Blvd., Helena, MT 59601

Ladies and Gentlemen:

Please find enclosed an Environmental Assessment (EA) prepared for the Future Fisheries Improvement Program. The Program tentatively plans to provide funding to restore the condition of the lower approximately10000 feet of Nevada Spring Creek, a tributary to Nevada Creek in the upper Blackfoot River drainage. This project would be a continuation of work that has been completed on the upper two thirds of the spring creek during 2001 and 2002. This proposed project is located on property owned by Nevada Spring Creek Partners and the USFWS approximately 2 miles north of the town of Helmville in Powell County.

Please submit any comments that you have by 5:00 P.M., April 14, 2003 to the Department of Fish, Wildlife and Parks in Helena at the address listed above. Completion of this project is contingent upon approval being granted by the Fish, Wildlife and Parks Commission. If you have any questions, feel free to contact me at (406) 444-2432. Please note that this draft EA will be considered as final if no substantive comments are received by the deadline listed above.

Sincerely,

Mark Lere, Program Officer
Habitat Protection Bureau
Fisheries Division
e-mail: mlere@state.mt.us

ENVIRONMENTAL ASSESSMENT
Fisheries Division
Montana Fish, Wildlife and Parks
Nevada Spring Creek Channel Restoration Project

General Purpose: The 1995 Montana Legislature enacted statute 87-1-272 through 273 that directs the Department to administer a Future Fisheries Improvement Program. The program involves providing funding for physical projects to restore degraded fish habitat in rivers and lakes for the purpose of improving wild fisheries. The legislature established an earmarked funding account to help accomplish this goal. Additionally, the 1999 Montana Legislature amended statute sections 87-1-273, 15-38-202 and Section 5, Chapter 463, Laws of 1995 to create a bull trout and cutthroat trout enhancement program. The program calls for the enhancement of bull trout and cutthroat trout through habitat restoration, natural reproduction, and reductions in species competition by way of the Future Fisheries Program. The Future Fisheries Improvement Program is proposing to provide funding for a project calling for the restoration of a degraded reach of Nevada Spring Creek. This project would be a continuation of work completed in 2001 and 2002 involving the restoration of the upper and middle portions of the spring creek. The project calls for constructing a new 10,420-foot channel adjacent to and north of the existing channel. The intent of this project is to restore the condition of an important spring creek tributary to the Blackfoot River, via Nevada Creek, that has been severely damaged by past livestock grazing. The project site is located on properties owned by Nevada Spring Creek Partners and the U.S. Fish and Wildlife Service (USFWS) approximately 2 miles north of the town of Helmville in Powell County (Attachment 1).

I. Location of Project: This project will be conducted on lower Nevada Spring Creek located approximately 2 miles north of the town of Helmville within Township 13 North, Range 11 West, Sections 9 and 10 in Powell County.

II. Need for the Project: One goal within Montana Fish, Wildlife and Parks six-year operations plan for the fisheries program is to "restore and enhance degraded fisheries habitats" by implementing habitat restoration projects and administering the Future Fisheries Improvement Program to restore important habitats on private and public lands. This proposed project would help meet this goal.

Nevada Spring Creek has been damaged by past livestock management practices, resulting in an over-widened and shallow channel that is slightly entrenched and nearly devoid of woody riparian vegetation. The existing channel averages about 50 feet in width and 0.5 feet in depth. In-stream habitat for aquatic species in the existing channel is greatly simplified and, as a result, the creek supports very low trout numbers and provides almost no recruitment of juvenile fish to the Blackfoot River. Currently, the reach of Blackfoot River located near the mouth of this spring creek supports the lowest population densities of trout found in the drainage. Low trout densities and associated poor recruitment are due to poor spawning habitat and extreme fluctuations in water temperature. This proposed project would complement previous restoration work conducted on Nevada Spring Creek and would, in effect, complete the restoration of the entire channel.

III. Scope of the Project:

The project proposes to restore a 9,140-foot over-widened and shallow reach of lower Nevada Spring Creek by building a new stream channel along the north bank of the existing channel (Attachment 2). The

project calls for constructing a Rosgen E-4 channel type, approximately 10,240-foot in length, that would provide access to a substantial floodplain. New wetlands would be developed in ephemeral drainages and in the abandoned channel following construction. Two work bridges would be constructed and left in place following completion of the project to provide local access for land management purposes. Woody debris will be incorporated along the entire length of the new channel at a rate of approximately 1 piece per 28 feet of channel and gravel will be placed into the channel bottom along 4,500 feet of the upstream portion of the project. The project also calls for the strategic placement of approximately 100 yards of large rock along the channel margin to increase habitat diversity. The channel design calls for moving the spring creek's confluence with Nevada Creek approximately 7,500 feet downstream. Riparian vegetation will be enhanced with the planting of 100 black cottonwood trees and 100 quaking aspen and the transplanting of 50 large willow clumps. This project is expected to cost $261,745.00. Of this total, the Future Fisheries Improvement Program would be contributing up to $25,000.00.

IV. Environmental Impact Checklist:

Please see attached checklist.

V. Explanation of Impacts to the Physical Environment

1. Terrestrial and aquatic life and habitats.

Restoring the existing channel to a more narrow and deep Rosgen "E" channel type is expected to create a healthier habitat for aquatic life by increasing the length of the channel, improving environmental diversity, improving spawning and rearing habitat and maintaining a more constant "fish friendly" water temperature. A healthier aquatic habitat is expected to enhance salmonid recruitment to the Blackfoot River, as well as resident fish populations in the spring creek. Habitat for riparian dependent wildlife would also be improved by planting riparian trees and shrubs and by providing better management of livestock grazing within the riparian corridor through fencing and the development of a rotational grazing plan.

2. Water quantity, quality and distribution.

Short-term increases in turbidity will occur during project construction. To minimize turbidity, construction of the restored stream reach would be completed "in the dry" before water is turned in from the existing active channel. In addition, operation of equipment in the active stream channel will be minimized to the extent practicable. The Department of Environmental Quality will be contacted to determine narrative conditions required to meet short-term water quality standards and protect aquatic biota. A 310 permit will be obtained from the local conservation district and the U.S. Army Corp of Engineers will be contacted to determine the need to meet 404 provisions of the Clean Water Act.

In the long term, this project is expected to improve water quality and water temperatures in both Nevada Spring Creek and the upper Blackfoot River. The constructed wetland cells proposed for the old channel will act as filters for sediment and livestock nutrients entering the drainage. In addition, construction of a more narrow and deep channel is expected to produce stable water temperatures that are more representative of a typical Montana spring creek.

3. Geology and soil quality, stability and moisture.

Soils along the stream margin would be disturbed during construction of the new channel, but would quickly stabilize following proposed re-vegetation efforts. Re-vegetation efforts would involve placement of salvaged sod and seeding with native sedges and grasses, planting riparian trees and transplanting large willow clumps. Overall, the project is expected to improve channel stability by returning the stream to a natural meander pattern and by providing over bank flow access to the floodplain.

4. Vegetation cover, quantity and quality.

Riparian vegetation and cover, primarily non-native grasses, would be disturbed during the period of construction. However, proposed re-vegetation efforts, in conjunction with implementing a livestock grazing management plan, would result in an overall improvement to the riparian vegetation.

5. Aesthetics.

In the short term, aesthetics would be adversely impacted due to the on-site construction activities. In the long term, aesthetics would be enhanced by restoring an over-widened and shallow reach of stream to a healthier and more natural stream environment. In addition, the riparian vegetative community would be enhanced by riparian plantings and by improved grazing management through the use of an appropriate grazing management plan.

7. Unique, endangered, fragile, or limited environmental resources.

The Blackfoot River drainage supports both westslope cutthroat trout and bull trout. Bull trout are listed as threatened under the Endangered Species Act and westslope cutthroat trout are considered a species of special concern in Montana. Currently, Nevada Spring Creek supports brown trout, westslope cutthroat trout and longnose sucker. Restoration of Nevada Spring Creek is expected to enhance westslope cutthroat trout and bull trout populations in the upper Blackfoot River drainage by improving water quality, stabilizing water temperatures, creating greater environmental complexity and improving spawning and recruitment habitat.

9. Historic and archaeological sites

The State Historic Preservation Office has been contacted to determine the need for compliance with the federal historic preservation regulations. The project area has been surveyed for the presence of cultural resources. Two cultural sites were identified during the survey. These identified sites will not be disturbed by construction activities. The project will not begin until a cultural clearance is granted.

VI. Explanation of Impacts on the Human Environment.

7. Access to & quality of recreational activities.

The Blackfoot River supports a very popular recreational fishery. The intent of the project is to improve habitat conditions and recruitment of salmonids to both Nevada Spring Creek and the upper Blackfoot River. As a result, the recreational fishery in the river is expected to improve. The recreational fishery in the spring creek also is expected to improve, although public access is limited to about 0.25 miles of stream flowing through USFWS property and to the utilization of Montana's stream access law.

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no action is taken, this reach of Nevada Spring Creek will remain over-widened, shallow and slightly entrenched. Aquatic habitat will remain over-simplified, water temperatures will continue to be unstable and fish populations will remain suppressed. In addition, this reach of stream will continue to provide only minimal recruitment of salmonids to the upper Blackfoot River. Recreational opportunities associated with fish and wildlife resources will remain reduced and aesthetics will continue to be impaired.

2. Conduct habitat restoration within the existing over-widened stream reach

This alternative would not resolve the entrenched nature of the existing channel nor would the alternative create additional stream length. Restoration efforts commonly fail when attempted in an entrenched channel due to the inability of the stream to access its floodplain. Additionally, an enormous quantity of fill would need to be imported over unstable ground to restore proper dimensions to the existing channel. Construction in the active channel also likely would violate water quality standards.

3. The Proposed Alternative

The proposed alternative is designed to restore a 9,140-foot over-widened and shallow reach of stream by constructing a new 10,240-foot Rosgen "Type E" channel adjacent to and north of the existing channel. This alternative would increase the length of the existing channel and would greatly improve the diversity of aquatic habitat in the stream. The intent of the project is to improve spawning and rearing habitat for salmonids in the upper Blackfoot drainage, provide improved thermal conditions for fish both in the spring creek and in the upper Blackfoot River and improve the vegetative community within the riparian corridor. This alternative would improve fish and wildlife habitat, aesthetics and water quality within the project area and would be expected to increase trout populations both in the spring creek and in the upper Blackfoot River.

VIII. Environmental Assessment Conclusion Section

1. Is an EIS required? No.

We conclude from this review that the proposed activities will have a positive impact on the physical and human environment.

2. Level of public involvement.

The proposed project was reviewed and supported by the public review panel of the Future Fisheries Improvement Program. The proposed project also will be reviewed by the Fish, Wildlife and Parks Commission and will be contingent upon their approval. The Environmental Assessment (EA) is being distributed to all individuals and groups listed on the cover letter. The EA also will be published on Montana Fish, Wildlife and Parks webpage: fwp.state.mt.us.

3. Duration of comment period?

Public comment will be accepted through 5:00 PM on April 14, 2003.

4. Person responsible for preparing the EA.

Mark Lere, Program Officer
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Montana Department of Fish, Wildlife and Parks
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Helena, MT 59620

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MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS
1420 E 6th Ave, PO BOX 200701, Helena, MT 59620-0701
(406) 444-2535

ENVIRONMENTAL ASSESSMENT

Project Title Nevada Spring Creek Channel Restoration Project

Division/Bureau Fisheries Division -Future Fisheries Improvement
Description of Project The Future Fisheries Improvement Program is proposing to provide funding for a project calling for the channel restoration of the lower reach of Nevada Spring Creek. This project would be a continuation of restoration work completed on the upper two thirds of the spring creek in 2001 and 2002. The project calls for the construction of a new 10,420-foot channel adjacent to and north of the existing channel. The intent of the proposed project is to restore the condition of an important spring creek in the upper the Blackfoot River drainage that has been severely damaged by past livestock grazing management. The project site is located on property owned by Nevada Spring Creek Partners and the USFWS approximately 2 miles north of the town of Helmville in Powell County.

POTENTIAL IMPACT ON PHYSICAL ENVIRONMENT

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Terrestrial & aquatic life and habitats			X			X
2. Water quality, quantity & distribution			X			X
3. Geology & soil quality, stability & moisture			X			X
4. Vegetation cover, quantity & quality			X			X
5. Aesthetics			X			X
6. Air quality				X		
7. Unique, endangered, fragile, or limited environmental resources			X			X
8. Demands on environmental resources of land, water, air & energy				X		
9. Historical & archaeological sites				X		X

POTENTIAL IMPACTS ON THE HUMAN ENVIRONMENT

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Social structures & mores				X		
2. Cultural uniqueness & diversity				X		
3. Local & state tax base & tax revenue				X		
4. Agricultural or industrial production				X		
5. Human health				X		
6. Quantity & distribution of community & personal income				X		
7. Access to & quality of recreational and wilderness activities			X			X
8. Quantity & distribution of employment				X		
9. Distribution & density of population & housing				X		
10. Demands for government services				X		
11. Industrial & commercial activity				X		
12. Demands for energy				X		
13. Locally adopted environmental plans & goals				X		
14. Transportation networks & traffic flows				X		

Other groups or agencies contacted or which may have overlapping jurisdiction North Powell Conservation District, US Fish and Wildlife Service, US Army Corp of Engineers, Montana Department of Environmental Quality, State Historic Preservation Office

Individuals or groups contributing to this EA Don Peters, DJP Aquatic Consulting

Recommendation concerning preparation of EIS No EIS required.

EA prepared by:Mark Lere
Date: February 14, 2003